

ABSTRACT

Disclosed is a transmission power control method which enables communications between a base station and a terminal station to be always performed at a high transfer rate by always assuring an uplink communication path between a base station which can transfer a downlink signal most efficiently and a terminal station. Each of terminal stations 111 to 119 selects a base station which can receive a downlink radio wave with the highest power, and transmits a code for identifying the base station on an uplink signal. When the received power of the uplink radio waves transmitted from the terminal station which has transmitted the code identifying the own station is higher than the threshold value, each of base stations 501 to 503 transmits a control signal for decreasing the power to the terminal station. When the terminal station sends a code for identifying another station or the power of the uplink radio waves received from the terminal station is lower than the threshold value, a control signal for increasing the power is sent to the terminal station. When even one power control signal for giving instruction to decrease the transmission power exists, each terminal station decreases its transmission power. When there is not the power control signal, each terminal station increases its transmission power.